

METHOD OF PACKING PACKETS OF CIGARETTES, AND SHEET OF  
PACKING MATERIAL FOR IMPLEMENTING SUCH A METHOD

TECHNICAL FIELD

The present invention relates to a method of packing packets of cigarettes.

More specifically, the present invention relates to a method of packing an orderly group of packets of cigarettes in a sheet of packing material to form a carton of cigarettes, to which the following description refers purely by way of example.

BACKGROUND ART

Cartons of cigarettes normally comprise ten packets of cigarettes arranged in an orderly parallelepiped-shaped group, which is enclosed in a sheet of paper or in a cardboard blank, and is then wrapped in a sheet of transparent heat-seal plastic material, normally polypropylene.

Each packet of cigarettes is printed on the outer surface with the trademark and brand name of the cigarettes, maker's details, and all compulsory information required by law, and which, in particular,

comprises the content of the cigarettes and a government health warning.

Since legal requirements vary from one country to another, the information printed on the packet must be adapted accordingly.

And the same also applies to cartons, so that the carton packing material (sheet of paper or cardboard blank) must be adapted to each individual country.

DISCLOSURE OF INVENTION

It is an object of the present invention to provide a method of packing packets of cigarettes, designed to reduce the cost of conforming with the legal requirements of individual countries.

According to the present invention, there is provided a method of packing packets of cigarettes as recited by Claim 1.

The present invention also relates to a sheet of packing material for implementing the packing method as claimed in Claim 1.

According to the present invention, there is provided a sheet of packing material as recited by Claim 17.

BRIEF DESCRIPTION OF THE DRAWINGS

A non-limiting embodiment of the present invention will be described by way of example with reference to the accompanying drawings, in which:

Figure 1 shows a view in perspective, with parts removed for clarity, of an orderly group of packets of

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CLAIMS

1) A method of packing packets of cigarettes, in particular an orderly group (1) of packets of cigarettes;  
5 the method comprising the steps of folding a sheet (11) of heat-seal plastic packing material about said orderly group (1) to form a tubular wrapping having two tubular portions (21) projecting with respect to the orderly group (1), each tubular portion (21) comprising four  
10 flaps (18b, 18c, 18d, 18f); folding each flap (18b, 18c, 18d, 18f) onto the orderly group (1), so as to at least partly superimpose said flaps (18b, 18c, 18d, 18f); and sealing the superimposed flaps (18b, 18c, 18d, 18f) to one another; the method being characterized by packing  
15 said orderly group (1) solely in said sheet (11) of packing material; said sheet of packing material being transparent, so that said packets (2) are visible through the sheet (11) of packing material.

2) A method as claimed in Claim 1, wherein said  
20 orderly group (1) has two main faces (8), two lateral faces (9), and two end faces (10); said flaps (18b, 18c, 18d, 18f) being superimposed on said end faces (10).

3) A method as claimed in Claim 1 or 2, wherein the outer flap (18d) has a portion (19) bearing graphics  
25 (20).

4) A method as claimed in Claim 3, wherein said flaps (18b, 18c, 18d, 18f) is sealed by melting the sheet (11) of packing material to define at least one bead seal

(22, 23, 24, 25) outwards of said graphics (20).

5) A method as claimed in Claim 3 or 4, wherein said at least one bead seal (22, 23, 24, 25) defines an endless path (26) surrounding said graphics (20).

5 6) A method as claimed in Claim 5, wherein said endless path (26) is defined by a number of adjacent bead seals (22, 23, 24, 25).

7) A method as claimed in Claim 6, wherein said adjacent bead seals (22, 23, 24, 25) overlap.

10 8) A method as claimed in any one of Claims 5 to 7, wherein each said bead seal (22, 23, 24, 25) is located close to an edge of said orderly group (1).

9) A method as claimed in any one of Claims 1 to 8, wherein said sheet (11) of packing material comprises a  
15 central panel (12), and two lateral panels (13) separated ideally from the central panel (12) by two ideal fold lines (14); the method comprising forming slits (16) along the lateral panels (13), and which extend between the edges of the sheet (11) of packing material and said  
20 ideal fold lines (14) to define a number of portions (18a, 18b, 18c, 18d, 18e) defining said flaps (18b, 18c, 18d, 18f).

10) A method as claimed in Claim 9, wherein each slit (16) is formed by cutting said sheet (11) of packing  
25 material.

11) A method as claimed in Claim 9, wherein each slit (16) is formed by cutting and blanking to remove part of the sheet (11) of packing material.

12) A method as claimed in Claim 10 or 11, wherein a portion (17) of said sheet (11) of packing material at one end of said slit (16) is thermally perforated and hardened.

5        13) A method as claimed in Claim 10 or 11, wherein an adhesive label (27) is applied to said sheet (11) of packing material at one end of said slit (16).

14) A method as claimed in Claim 9, wherein each slit (16) is formed by cutting said sheet (11) of packing  
10 material, combined with melting the slit (16) at one end of the slit (16).

15) A method as claimed in Claim 9, wherein each slit (16) is formed by melting part of said sheet (11) of packing material.

15        16) A method as claimed in any one of Claims 9 to 15, wherein the sheet (11) is detached of packing material from a continuous web of heat-seal plastic material.

17) A sheet of packing material for implementing the  
20 method of packing packets (2) of cigarettes as claimed in any one of Claims from 1 to 16, said sheet (11) of packing material being characterized by being made of transparent heat-seal plastic material, and by comprising a central panel (12), and two lateral panels (13)  
25 defining the projecting tubular portions (21) when the sheet (11) of packing material is folded about the orderly group (1) to form a tubular wrapping; each lateral panel (13) having slits (16) dividing the lateral

panel (13) into adjacent portions (18a, 18b, 18c, 18d, 18e) defining said flaps (18b, 18c, 18d, 18f) of a respective projecting tubular portion (21).

18) A sheet of packing material as claimed in Claim 5 17, wherein each lateral panel (13) extends between a free edge of the sheet (11) of packing material and an ideal fold line (14).

19) A sheet of packing material as claimed in Claim 18, wherein each slit (16) has a first end located at 10 said free edge, and a second end located between said free edge and said ideal fold line (14).

20) A sheet of packing material as claimed in Claim 19, wherein said second end is located at said ideal fold line (14).

15 21) A sheet of packing material as claimed in Claim 19 or 20, wherein, at said second end, each slit (16) is curved to prevent initiating a tear in said sheet (11) of packing material.

22) A sheet of packing material as claimed in Claim 20 20, wherein said second end of the slit (16) is defined by an opening (29) bounded by a curved endless edge.

23) A sheet of packing material as claimed in Claim 22, wherein said opening (29) is formed by blanking the sheet (11) of packing material.

25 24) A sheet of packing material as claimed in Claim 22, wherein said opening (29) is formed by melting the sheet (11) of packing material.

25) A sheet of packing material as claimed in Claim

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21, wherein said second end of the slit (16) is in the shape of a curved hook (28).

26) A sheet of packing material as claimed in Claim 20, wherein each slit (16) is defined by a slot (30) having two opposite edges (31) connected by a curved side (32) at the second end.

27) A sheet of packing material as claimed in Claim 18 or 19, and comprising an adhesive label (27) at the second end of each slit (16) to prevent initiating a tear in said sheet (11) of packing material.

28) A sheet of packing material as claimed in Claim 18 or 19, and comprising a thermally hardened portion (17) of the sheet (11) of packing material at the second end of each slit (16) to prevent initiating a tear in said sheet (11) of packing material.

29) A sheet of packing material as claimed in any one of Claims 17 to 28, wherein at least one of said portions (18a, 18b, 18c, 18d, 18e) has graphics (20).

30) A sheet of packing material as claimed in Claim 29, wherein said graphics (20) comprise a bar code.

31) A sheet of packing material as claimed in Claim 29 or 30, wherein said graphics (20) are located on a non-transparent portion (19) of said sheet (11) of packing material.

32) A sheet of packing material as claimed in any one of Claims 17 to 31, wherein said sheet (11) is made of polypropylene.